

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of:	)	
	)	Public Notice DA 01-1072
	)	Docket No. 01-109
Extension of the Five-Year Build-Out	)	
Period for BTA Authorization Holders	)	
In the Multipoint Distribution Service	)	

TO: Chief, Mass Media Bureau

**COMMENTS OF NUCENTRIX BROADBAND NETWORKS, INC.**

Nucentrix Broadband Networks, Inc. ("Nucentrix"), hereby submits its comments on the above-captioned public notice released on April 25, 2001.<sup>1</sup> Nucentrix has made great strides in the licensing and construction of incumbent and Basic Trading Authorization ("BTA") stations in its BTA markets, despite the shift in the Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") industry from downstream analog video to two-way digital broadband services. Nevertheless, given that the first permanent two-way authorizations were issued only last month, Nucentrix supports a minimum two-year extension of the BTA build-out requirement and the construction deadlines for new BTA stations. In addition to being necessary to complete the migration to a two-way digital platform, such an extension will afford the Commission an opportunity to review and clarify the build-out compliance

<sup>1</sup> *In the matter of Extension of the Five-Year Build-Out Period for BTA Authorization Holders in the Multipoint Distribution Service*, Public Notice, DA 01-1072 (rel. April 25, 2001) ("Public Notice").

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standard specified in Section 21.930 of the Commission's rules.<sup>2</sup> Nucentrix submits that a "substantial service" standard—such as the standard applicable to Wireless Communications Service ("WCS"), Local Multipoint Distribution Service ("LMDS"), 24 GHz and 39 GHz licensees—would be more appropriate than the existing standard.

**I. NUCENTRIX HAS MADE DRAMATIC PROGRESS IN LICENSING AND BUILDING-OUT ITS BTAS DESPITE FUNDAMENTAL CHANGES IN THE MDS/ITFS INDUSTRY**

Since the initial award of its BTA authorizations, Nucentrix aggressively has pursued licensing and building out its markets despite a constantly changing landscape in the MDS/ITFS industry. Nucentrix was the winning bidder at the FCC's March 1996 BTA auction for more BTAs than any other auction participant and holds authorizations for approximately 90 BTAs. As a long-standing MDS license holder, Nucentrix had two goals at the 1996 auction: (1) to protect its existing licenses in heavily encumbered markets by obtaining the right to available spectrum in those markets; and (2) to expand its service footprint to new markets. Achievement of both goals required a sustained, systematic effort to license new BTA stations and construct both incumbent and new stations as authorized by the Commission.

Nucentrix's commitment to its licensing and construction goals has yielded dramatic results. Where spectrum has become available in Nucentrix's BTAs, the company diligently has pursued its licensing. To date, Nucentrix has applied for over 500 new BTA channels, and received approximately 370 BTA channel authorizations. A number of applications remain pending. Construction efforts, similarly, have been aggressive. Nucentrix has constructed and certified approximately 350 incumbent channels in 35 BTA markets, as well as approximately

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<sup>2</sup> 47 C.F.R. § 21.930.

170 new BTA channels in 21 BTAs. In addition, where Nucentrix is the BTA licensee for an encumbered market, as is the case in substantially all of the company's BTAs, the company has filed a "statement of intention" ("SOI") declaring its commitment to pursue licensing and construction when spectrum becomes available.

Nucentrix's licensing and construction efforts have gone forward despite a constantly changing landscape in the MDS/ITFS industry. As the Commission notes in the Public Notice, the FCC authorized the use of digital compression technologies for MDS spectrum in July 1996<sup>3</sup> and high-speed data applications in October of the same year.<sup>4</sup> These developments marked the very early stages of the transition of MDS/ITFS from an analog video to a digital broadband service. In March 1997—less than one year after the FCC issued BTA licenses to winners of the 1996 auction—a consortium representing substantially the entire MDS/ITFS industry petitioned the Commission for authorization to offer two-way services on MDS/ITFS spectrum. By its *Two-Way Order*, the Commission authorized such services in September 1998.<sup>5</sup>

Nucentrix has been an industry leader in rolling out two-way digital services. Even before the release of the *Two-Way Order*, the company obtained a developmental authorization for two-way services in Sherman-Denison, Texas in August 1998 and began providing such

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<sup>3</sup> *In the Matter of Request for Declaratory Ruling on the Use of Digital Modulation by Multipoint Distribution Service and Instructional Television Fixed Service Stations*, 11 FCC Rcd 18839 (1996); see Public Notice at ¶ 2.

<sup>4</sup> *Public Notice, The Mass Media Bureau Implements Policy for Provision of Internet Service on MDS and Leased ITFS Frequencies*, 11 FCC Rcd 22419 (1996); see Public Notice at ¶ 2.

<sup>5</sup> *In the Matter of Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112 (1998) ("*Two-Way Order*"), *recon.*, 14 FCC Rcd 12764 (1999), *further recon.*, 15 FCC Rcd 14566 (2000).

service under the authorization in February 1999. By May 1999, Nucentrix had obtained a second developmental two-way authorization, in Austin, Texas, and had begun providing broadband service. More recently, the company has been a pioneer in the development, testing and roll-out of next generation fixed wireless broadband technology that ultimately may be used by much of the MDS/ITFS industry. In February 2000, Nucentrix entered a strategic alliance with Cisco Systems, Inc. to develop and test an Orthogonal Frequency Division Multiplexing (“OFDM”) based technology platform. This potential next generation industry-standard technology platform has the capability to expand subscriber coverage by mitigating the line-of-sight problems that historically have vexed MDS/ITFS operators. In August 2000, Nucentrix and Cisco successfully completed an initial field trial in Austin, Texas. Additional field trials in Amarillo, Texas are ongoing.

Nucentrix also has been a prolific filer of applications for permanent two-way authority on its facilities. Of the 2,267 applications filed during the Commission’s initial window in August 2001, Nucentrix filed over 400. Likewise, Nucentrix applications were represented proportionally among the first wave of over 1,000 two-way applications granted by the Commission on April 6, 2001. Additional grants are being released on a daily basis. Nucentrix has worked, and will continue to work diligently with the staff of the FCC’s Video Services Division to secure grants of the company’s remaining applications.

## **II. AN EXTENSION OF THE BTA BUILD-OUT REQUIREMENT—AS WELL AS THE CONSTRUCTION DEADLINES FOR NEW BTA STATIONS—IS NECESSARY TO ENABLE BTA LICENSEES TO BUILD-OUT THEIR RECENTLY LICENSED TWO-WAY SYSTEMS**

Nucentrix supports a minimum two-year extension of the BTA build-out requirement and the related construction deadlines for new BTA stations in order to complete the digital migration that, as described above, is in its advanced stages. As the Public Notice acknowledges, the deadline for most BTA holders to comply with Section 21.930 is August 16, 2001.<sup>6</sup> Indeed, this date—just three months away—actually *overstates* the amount of time licensees have to comply with this rule. Because BTA holders must certify compliance with the build-out rule 60 days in advance of the deadline<sup>7</sup> (June 18, 2001), in the absence of an extension these licensees have just weeks to construct their facilities, some of which are subject to two-way applications that remain pending and some of which were licensed only last month in the FCC’s initial two-way Public Notice. Requiring construction of fixed wireless facilities on such a short time frame under any scenario is neither reasonable nor feasible.

The same problem arises with respect to the construction deadlines that apply to new BTA station licenses. When a BTA holder applies for a new station license for available channels in its market, it has been the Commission’s practice to use the BTA build-out deadline as the construction deadline in the new station authorization. However, again because the FCC only recently has begun to issue two-way authorizations, this practice has the unintended consequence of requiring construction of all new stations in the next few weeks. Accordingly, a

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<sup>6</sup> See Public Notice at ¶ 1.

<sup>7</sup> 47 C.F.R. § 21.930(c)(2).

blanket extension is warranted and will harmonize the Commission's service coverage objectives with its newly-authorized broadband agenda for MDS facilities.

Failure to extend the BTA build-out period and BTA station construction would disserve the public interest by frustrating important policy objectives. The Commission's express policy is to allow regulatory flexibility to accommodate innovations in technology that will maximize both the efficiency and range of services which can be provided over existing licensed spectrum.<sup>8</sup> As the FCC itself noted in the *Two-Way Order*, deployment of two-way services is the most efficient use of MDS/ITFS spectrum.<sup>9</sup> That factor weighed heavily in the agency's decision to give licensees the flexibility to use their spectrum for this purpose.<sup>10</sup> The Commission also has commented on the efficiency of leasing ITFS/MDS spectrum in its *Secondary Markets* proceeding.<sup>11</sup> There is no reason to revisit these decisions and continue to delay broadband deployment now, especially in light of the Commission's enormous investment of time and resources in licensing two-way services to date.

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<sup>8</sup> *Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium*, FCC 99-354 (rel. Nov. 22, 1999) at ¶ 7 (“... it is important to encourage the development and deployment of new, more efficient technologies that will increase the amount of information that can be transmitted in a given amount of bandwidth.”); *Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, FCC 00-401 (rel. Dec. 1, 2000), Notice of Proposed Rulemaking, FCC 00-402 (rel. Nov. 27, 2000) at ¶ 2 (“we would be concerned if our regulations and policies are in some fashion unnecessarily inhibiting the operation of market forces . . . we believe that by revising Commission policies and rules to help enable more effective secondary markets, we will expand the ability of wireless licensees to enter voluntary transactions to make all or part of their spectrum usage rights available for new uses.”).

<sup>9</sup> *Two-Way Order* at ¶ 6.

<sup>10</sup> *Id.*

<sup>11</sup> *Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, FCC 00-401 at ¶ 14 (rel. Dec. 1, 2000).

In addition, failure to extend the deadline for complying with Section 21.930 and the related construction deadlines would result in economic waste. Nucentrix has devoted substantial human and capital resources to advance broadband two-way deployment, including to design and engineer two-way systems, test and acquire equipment, prepare and file two-way license applications, re-negotiate MDS and ITFS spectrum leases, and secure tower sites. Nevertheless, if the deadlines are not extended, the company will be forced to add to this list the expense of continued analog build-out—the only mass build-out even remotely possible given the time frame—only to scrap the facilities when two-way services are deployed. Such investment would be directed to a purely regulatory purpose, rather than any prudent business objective, and would slow broadband deployment. An extension, by contrast, properly incents continued beneficial investment in a timely roll-out of fixed wireless broadband services.

### **III. THE STANDARDS FOR COMPLYING WITH THE BTA BUILD-OUT REQUIREMENT WILL NEED TO BE REVISITED IN A TWO-WAY ENVIRONMENT**

An extension of the BTA build-out requirement also would afford the Commission an opportunity to review and clarify the standards for complying with Section 21.930. The current standard for demonstrating build-out compliance is deficient in a number of respects. Chief among them is that the rule envisions a divergence of interests between incumbent station licensees and BTA station licensees that, in practice, does not exist. Specifically, Section 21.930(c)(1) requires that, within five years of receiving a BTA license, the license holder “construct MDS stations to provide signals . . . that are capable of reaching at least two-thirds of the population of the applicable service area, *excluding the populations within the protected*

*service areas of incumbent stations.”*<sup>12</sup> Such a standard makes little sense when the same entity is both the BTA holder and the licensee of some or all of the incumbent MDS stations, as well as the lessee of ITFS and other incumbent MDS stations, in a particular market. In such a scenario—the prevailing scenario in most of the markets where Nucentrix holds licenses—construction is planned in a manner to achieve efficient, market-wide deployment. No distinction is made between construction within the boundaries of incumbent protected service areas and construction outside those boundaries but within the BTA. Accordingly, all construction in a BTA, whether undertaken on behalf of an incumbent station, BTA station or leased station (ITFS or MDS), should be counted toward satisfaction of the BTA build-out requirement.

The build-out standard of 21.930(c)(1) is unclear in a number of other respects, as well. For example, implicit in the rule is the assumption that vacant or forfeited channels will become available for a BTA holder to license and construct. Thus the rule specifies that the BTA holder “must construct stations.”<sup>13</sup> However, in most of Nucentrix’s markets, the company obtained the BTA authorization by filing an SOI indicating that it would license and construct stations should they become available only to be faced with a situation where the market remains heavily encumbered. Section 21.930(c)(1) provides no guidance on how the licensee in an encumbered market can comply with current build-out requirements. On a more basic level, even the directive to “construct stations” is ambiguous—MDS and ITFS are licensed by channel, not by station. Similarly, while the rule requires signals capable of reaching two-thirds of the

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<sup>12</sup> 47 C.F.R. § 21.930(c)(1) (emphasis added).

<sup>13</sup> *Id.*



population, it does not specify how that showing must be made—i.e., by maps, licensee certification or some other method.

By adopting a “substantial service” standard, the Commission can eliminate the complexity and ambiguity of Section 21.930’s build-out requirement. Rather than quibbling over how two-thirds of the population is to be measured, and whether signal coverage falls inside or outside an incumbent’s PSA, the substantial service standard requires that the licensee provide service that is “sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal during its past license term.”<sup>14</sup> The Commission has adopted a substantial service standard for other fixed wireless broadband services such as WCS,<sup>15</sup> LMDS,<sup>16</sup> 24 GHz,<sup>17</sup> and 39 GHz.<sup>18</sup> There is no legitimate policy or regulatory rationale for distinguishing the compliance standard for MDS/ITFS. Moreover, a substantial service standard is consistent with the Commission’s policy of conferring regulatory flexibility to accommodate new technologies and promote efficient spectrum use.<sup>19</sup>

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<sup>14</sup> See, e.g., *Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (“WCS”)*, 12 FCC Rcd 10785, ¶ 113 (1997).

<sup>15</sup> *Id.*

<sup>16</sup> *Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 12 FCC Rcd 12545, ¶¶ 266-270 (1997), *affirmed Melcher v. FCC*, 134 F.3d 1143, 1161-2 (D.C. Cir. 1998).

<sup>17</sup> *Amendments of Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, 15 FCC Rcd 16934, ¶¶ 36-38 (2000).

<sup>18</sup> *Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, 12 FCC Rcd 18600, ¶¶ 41-45 (1997).

<sup>19</sup> See, *supra*, note 8.

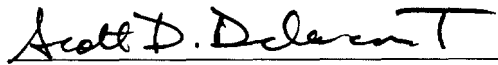
#### IV. CONCLUSION

For the foregoing reasons, Nucentrix supports a minimum two-year extension of the BTA build-out deadline, and the construction deadline for BTA stations. In addition, the agency should adopt a "substantial service" standard for complying with the BTA build-out requirement, consistent with the Commission's requirements in services comparable to MDS and ITFS.

Respectfully submitted,

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May 9, 2001


**CERTIFICATE OF SERVICE**

I, Christine Peyton, hereby certify that on this 9th day of May, 2001, I caused copies of the foregoing "Comments of Nucentrix Broadband Networks, Inc." to be mailed via first-class postage prepaid mail to the following:

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